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EXAMINER

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2623

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/734,996	BRASSIL, JOHN T.	
	Examiner	Art Unit	
	Michael W. Hoyer	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 and 32-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 and 32-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Remarks, filed on January 8, 2007, with respect to the rejection of claims 1-11, 13-18, 23-24 and 26-28 under U.S.C. § 102(e) as being anticipated by Flavin have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made under U.S.C. § 103(a) as being unpatentable over Flavin (USPN 6,005,603), in view of Ullman et al (USPN 6,018,768), wherein the Ullman et al reference specifically teaches the claimed, "embedding a cue into one of a plurality of streams with the media content to provide precise time synchronization for the processing of the one of the plurality of media streams..." as described in the claim rejections below.

Applicant's arguments with respect to claims 12, 19-22, 25, 29-30 and 32-37, have been considered but are moot in view of the new grounds of rejection.

Claim Objections

2. Claim 36 is objected to because of the following informalities: in line 2 of the claim, the word --to-- or the appropriate language should be inserted between the words "server" and "a". Appropriate correction is required.

Claim Rejections - 35 USC § 103

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-11, 13-18 and 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flavin (USPN 6,005,603), in view of Ullman et al (USPN 6,018,768), both cited by the Examiner.

As to claim 1, note the Flavin reference which discloses a streaming media server (109 or 110 as shown in Figs. 1 and 2) for providing media content in a plurality of media streams (col. 2, lines 58-65; col. 3, lines 17-35 and col. 4, lines 23-52). Furthermore, segment announcers 109 and 110 are servers, which have a central data bank of descriptive information or descriptions 250 about the content of various content streams 112 currently being transmitted and/or to be transmitted in the future, and the descriptions 250 may be entered manually or automatically. In some cases these descriptions 250 are already associated with the content streams and programming descriptions from various program subscription services. The descriptions 250 of the content are transmitted by announcement 115 over the communication link 120 to the segment announcement receivers 150. Each announcement 115 may include cue points (col. 5, lines 17-25), and announcements 115 are transmitted in the content stream 112 (see col. 5, line 32-53), as described above (also see col. 2, lines 58-65; col. 3, lines 17-35 & 40-44; col. 4, line 23 – col. 6, line 7). Therefore, the segment announcers 109 and 110 meet the claimed streaming media server from providing a plurality of media streams comprising a cue generator. Although, the segment announcers 109/110 may not necessarily be the originating source of the media

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streams (i.e. a television broadcast station), they are still providers of a plurality of media streams (i.e., a live television broadcast which is distributed through the server(s)). The claimed “cue generator” is met by the segment announcer 110 (Figs. 1 and 2, and sections listed above) “for receiving an event detected signal and configuration information” is met by content streams 112 and descriptive information (col. 2, lines 58-65; col. 3, lines 17-35 and col. 4, lines 23-52), and the claimed “based thereon for generating a cue having a predefined structure” is met by the segment announcer and announcement 115 (col. 3, lines 17-35, col. 4, lines 23-52 and col. 5, lines 11-38); the claimed “wherein the cue is configured to be used by a stream processing application (SPA) to receive information concerning an event associated with the media content” is met by the application(s) provided by the server 110 or segment announcer 110 (col. 4, line 35 – col. 5, line 37). The claimed “cue handling mechanism for embedding the cue into one of the plurality of media streams with the media content to provide precise time synchronization for the processing of the one of the plurality of media streams by the SPA; and a network interface for transmitting the embedded cue and the media content in the one of the plurality of media streams to the SPA” is not explicitly disclosed by the Flavin reference. Flavin teaches that descriptive information 250 and announcements 115 including cue points may be entered automatically and transmitted in real time as described in the sections cited above. However, Flavin is silent as to whether or not the “cues” are embedded into one of the plurality of media streams. Ullman et al teaches an enhanced video programming system and method where a type of cue or uniform resource locators (URLs) are embedded into one of a plurality of media streams and transmitted with the media content in the one of the plurality of media streams, and the URLs may provide precise time synchronization (see col. 4, lines 44 – col. 5, line 30 and lines 50-54; col. 7, lines 2-

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11, 44-46 and 54-56; col. 9, lines 61-63 and col. 10, lines 10-15 and 45-49). Therefore, it would have been obvious to one of ordinary skill in the art to have combined the Flavin reference with the Ullman et al reference which provides the additional teachings of embedding cues into one of a plurality of media streams and providing precise time synchronization for the advantages of avoiding the process of having to match up the cues with the content at a receiving system by providing the cues with a media streams, and by providing time synchronization through stamps so that the cues accurately correspond to events in the media streams. One of ordinary skill in the art would have been led to make such a modification for the advantages given above.

As to claim 2, the claimed cue includes one of program timing, program structure, program identity, start time of a media program, and stop time of a media program is met by the program timing, structure, identity, start time, and end time of a program as discussed in Flavin (see col. 3, lines 37-40, col. 4, line 65 – col. 5, line 30, col. 5, line 63 – col. 6, line 7).

As to claim 3, the claimed stream processing application (SPA) is a program recording application is met by the recording applications as described in the example in col. 4, line 65 – col. 5, line 10 of Flavin.

As to claim 4, the claimed stream processing application (SPA) is a program insertion application is met by, in one example given in Flavin, inserting text on a TV or computer screen (col. 6, lines 30-36).

As to claim 5, the claimed stream processing application (SPA) is a program modification application is met by various examples in the Flavin reference, including eliminating commercials, turning the sound on or off, turning the picture on or off, displaying text on a TV

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or computer screen, sounding an alarm, etc. (see col. 4, line 65 – col. 5, line 10 and col. 6, lines 30-36).

As to claim 6, the claimed stream processing application (SPA) is a program adaptation application is met in Flavin by adapting to a program or broadcast associated with a geographic region or location (col. 5, lines 11-16).

As to claim 7, the claim is rejected based on the rejection of claim 4 respectively.

As to claim 8, the claimed cue includes time sensitive program information is met by Flavin wherein time information transmitted with each announcement 115 (col. 5, lines 17-31 and col. 5, line 48 – col. 6, line 4).

As to claim 9, the claimed cue includes a cue type that is one of an event notification cue, an event pending cue, an event termination cue, and an event continuing cue, and a user-defined custom cue is met by the announcements 115 and segment content information 350 in Flavin (col. 5, line 17 – col. 6, line 4).

As to claim 10, Flavin further discloses the claimed predefined structure of the cue includes at least one of the following fields: an event type field for specifying an event type as met by an announcement 115, a segment identifier section 320, and/or the segment content information 350 (col. 5, lines line 17 – col. 6, line 4); a cue type field for specifying a cue type is met by the announcement type field 405 (col. 6, lines 19-20); a number field for specifying a number that in combination with the event type specified by the event type filed uniquely describes an event is met by the message tag 311 (col. 5, lines 39-44); a duration field for specifying the time remaining before completion of a specified event is met by the interval information (col. 5, lines 32-37); a time field for specifying time information is met by time field

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321 (col. 5, lines 48-53); and a variable-length label field for storing text suitable for display is met by the variable length announcement content 353 field (col. 5, line 67 – col. 6, line 7).

As to claim 11, the claimed event type field is one of an advertisement event type, a video-frame event type, an interstice event type, an audio-track event type, an audio-segment event type, an video-segment event type cue, program-title event type, program-description event type, program-label event type, content-type event type, program-advisory, and user-defined event type is met by the announcement 115, segment identifier section 320, and/or segment content information 350, as described above in the Flavin reference, which disclose various event types as listed (see col. 5, lines line 17 – col. 6, line 4).

As to claim 13, note the Flavin reference which discloses a method for delivering information associated with a media program in a media stream to a stream processing application (SPA). The claimed identifying an event in the media program of the media stream is met by the streaming media server (109 or 110 as shown in Figs. 1 and 2, and as described above in claim 1), which identifies an event in the media program of the media stream (col. 2, lines 58-65; col. 3, lines 17-35 and col. 4, lines 23-52), where the servers 109 and 110, as described above, identify events and produce announcements 115 therefrom, wherein each announcement 115 contains the time of the event, the type of event, and other information (see col. 5, line 11 – col. 6, line 7). The claimed determining if the event is a structural point based on the configuration information is met by using the content streams 112 and descriptive information (col. 2, lines 58-65, col. 3, lines 36-40, col. 4, lines 23-52 and col. 5, line 11 – col. 6, line 7), and generating a cue packet to represent the structural point in response to determining that the event is a structural point is met by the segment announcer 110 and announcement 115

(Figs. 1 and 2, col. 3, lines 17-35, col. 4, lines 23-52 and col. 5, lines 11-38). The claimed “embedding said cue packet in said media stream with the media program to provide precise time synchronization for processing of the media stream by the SPA; and transmitting said cue packet and the media program in the media stream to the SPA” is not explicitly disclosed by Flavin. The Flavin reference teaches that announcements 115, including cue points, may be transmitted in the content stream 112, as described above in claim 1 (see col. 5, lines 17-53). However, Flavin is silent as to whether or not the “cue” packet is embedded in said media stream. Ullman et al teaches an enhanced video programming system and method where a type of cue or uniform resource locators (URLs) are embedded into media streams and transmitted with the media content in the media streams, and the URLs may provide precise time synchronization (see col. 4, lines 44 – col. 5, line 30 and lines 50-54; col. 7, lines 2-11, 44-46 and 54-56; col. 9, lines 61-63 and col. 10, lines 10-15 and 45-49). Therefore, it would have been obvious to one of ordinary skill in the art to have combined the Flavin reference with the Ullman et al reference which provides the additional teachings of embedding cues into one of a plurality of media streams and providing precise time synchronization for the advantages of avoiding the process of having to match up the cues with the content at a receiving system by providing the cues with a media streams, and by providing time synchronization through stamps so that the cues accurately correspond to events in the media streams. One of ordinary skill in the art would have been led to make such a modification for the advantages given above.

As to claim 14, the claimed step of generating a cue packet to represent the structural point includes one of a generating the cue packet automatically is met by automatic generation as described in col. 4, lines 38-52 of Flavin; and the claimed generating the cue packet manually

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with a user-operated trigger is met by a user or users generating the cues (col. 2, line 58 – col. 3, line 16, col. 4, lines 35-37).

As to claim 15, the claimed receiving a packet; determining whether the packet is a cue packet; when the packet is a cue packet, then determining if the cue packet triggers an action based on predetermined configuration parameters; when the cue packet triggers an action, using information from the cue packet to perform a function; otherwise, discarding the cue packet is met by the description in col. 6, lines 30-67 of Flavin, also see col. 4, lines 3-22 and col. 4, line 65 – col. 5, line 10.

As to claim 16, note the Flavin reference which discloses a content distribution network. The claimed media server for broadcasting a media program in at least one media stream to a stream processing application (SPA), the media program having at least one structural point is met by the streaming media server (109 or 110 as shown in Figs. 1 and 2, and as described above in claims 1 and 13), which broadcasts a media streams (content streams 112) and descriptive information (col. 2, lines 58-65, col. 3, lines 36-40, col. 4, lines 23-52 and col. 5, line 11 – col. 6, line 7), and more specifically, the server(s) produce descriptive information 250 about the content of various content streams 112 currently being transmitted and/or to be transmitted in the future, where the descriptions 250 are transmitted by announcements 115, wherein an announcement may contain additional description such as “Start of Commercial” or “End of Commercial” and other information (see col. 5, line 11 – col. 6, line 7). Moreover, on page 9, lines 11-17, of the Applicant’s specification, the term “structural point” is referred to as, “any point that has significance to the media being transmitted...structural points depend on the content. Examples of structural points include a starting point and ending point of a program

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segment and the starting points and ending points of sub-segments within the program segment.”

Therefore, the Flavin reference as described above meets the claimed limitation. The claimed server-side cue handling mechanism for delivering program timing, structure, and identity information related to the media program in the at least one media stream in the form of a cue is met by the segment announcer 110 and announcement(s) 115, including cue points, that may be transmitted in the content stream 112, as described above in claim 1 (see col. 5, lines 17-53; also see Figs. 1 and 2, col. 3, lines 17-35 and col. 4, lines 23-52). The claimed “wherein the cue is embedded in the at least one media stream with the media program to provide precise time synchronization for processing of the at least one media stream by the SPA” is not explicitly disclosed by the Flavin reference. The Flavin reference teaches that announcements 115, including cue points, may be transmitted in the content stream 112, as described above in claim 1 (see col. 5, lines 17-53). However, Flavin is silent as to whether or not the “cue” packet is embedded in said media stream. Ullman et al teaches an enhanced video programming system and method where a type of cue or uniform resource locators (URLs) are embedded into media streams and transmitted with the media content in the media streams, and the URLs may provide precise time synchronization (see col. 4, lines 44 – col. 5, line 30 and lines 50-54; col. 7, lines 2-11, 44-46 and 54-56; col. 9, lines 61-63 and col. 10, lines 10-15 and 45-49). Therefore, it would have been obvious to one of ordinary skill in the art to have combined the Flavin reference with the Ullman et al reference which provides the additional teachings of embedding cues into one of a plurality of media streams and providing precise time synchronization for the advantages of avoiding the process of having to match up the cues with the content at a receiving system by providing the cues with a media streams, and by providing time synchronization through stamps

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so that the cues accurately correspond to events in the media streams. One of ordinary skill in the art would have been led to make such a modification for the advantages given above.

As to claim 17, the claimed a client-side cue handling mechanism for receiving packets, determining that a particular packet is a cue packet, and decoding program tuning, structure, and identity information from the cue packet is met by receivers 150 and function 170 of Flavin (col. 4, lines 3-22, col. 4, line 65 – col. 6, line 7 and lines 30-67).

As to claim 18, the claimed application coupled to the client-side cue handling mechanism for using the program timing, structure, and identity information of the media stream to perform an application function is met by receivers 150 and function 170 of Flavin as described above in claim 17 (see col. 4, lines 3-22, col. 4, line 65 – col. 6, line 7 and lines 30-67).

As to claim 23, the claimed server of claim 1 further comprising a stream generator for generating said media streams is met by an alternative embodiment of Flavin where the media streams are generated by a stream generator that is inherent to a media server that produces various content streams 112 that can be sent by communication link 220/210 as shown in the alternative embodiment of Fig. 2 (see col. 4, lines 38-43).

As to claim 24, the claimed said cue generator is further operable to insert said generated cue into a corresponding media stream to which said generated cue relates is met by Flavin which discloses one or more devices that can be used to automatically provide descriptions 250/announcements 115 (or cue points) for a content stream 112 (col. 4, lines 43-53 and col. 5, lines 11-62), where events such as commercial boundaries or segment types, etc. may be identified, and an announcement 115 or cue is generated/inserted into the content stream 112 (also see col. 3, lines 36-39).

As to claim 25, the Flavin and Ullman references disclose the claimed server in claim 1 as described above. Flavin and Ullman do not explicitly disclose the claimed “wherein said cue is generated as a Real-Time Transport Protocol (RTP) payload. However, the Examiner takes Official Notice that it is notoriously well known in the art of video distribution systems that use the Internet as a network for distribution or broadcasting to use RTP for the advantage of delivering real-time data, including audio and video media more efficiently by using a well known Internet-standard protocol. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to have used RTP for the advantage given above.

As to claim 26, the claimed server-side stream generator for generating said at least one media stream, wherein said cue handling mechanism inserts said cue packet in the at least one media stream is met by the generator of Flavin (as described above in claims 23-24), wherein the segment announcer 110 and announcement(s) 115, including cue points, that may be transmitted in the content stream 112, as described above in claim 1 (see col. 5, lines 17-53; also see Figs. 1 and 2, col. 3, lines 17-35 and col. 4, lines 23-52).

As to claim 27, the Flavin reference further discloses the claimed server-side network interface (network interface connector or communication connector 205 see Fig. 2) for communicating said at least one media stream (112) having said cue packet (115) inserted therein across a communication network (120) to at least one client (150, 151, 152, 160, 161 and 163, see col. 3, line 54 – col. 4, line 2 and col. 5, lines 32-62).

As to claim 28, the claimed said network interface broadcasts said at least one media stream having said cue packet inserted therein to a plurality of clients is met by Flavin where

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announcements 115, including cue points, may be transmitted in the content stream 112 and broadcast to a plurality of clients as described above in claims 1 and 27 (also see col. 5, lines 17-53).

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Flavin, in view of Ullman et al, in further view of the SMPTE STANDARD (SMPTE 309M-1999) for Television – Transmission of Data and Time Zone Information in Binary Groups of Time and Control Code, and the SMPTE STANDARD (SMPTE 12M-1999) for Television, Audio and Film – Time and Control Code, all cited by the Examiner.

As to claim 12, the claimed date field includes data information encoded with a Society of Motion Picture and Television Engineer's (SMPTE) date encoding and wherein the time field includes time information encoded with a Society of Motion Picture and Television Engineer's (SMPTE) time encoding is not explicitly disclosed by the Flavin and Ullman references.

However, it is notoriously well known in the art of media or video distribution to include time and date fields with data information encoded with SMPTE date and time encoding for the advantage of having time and date codes that conform to SMPTE standards, which are well known and used in the video industry and may be useful for identifying video frames and timing information, especially, for video editing purposes, and in addition to, the SMPTE Standard for Television – Transmission of Data and Time Zone Information in Binary Groups of Time and Control Code as well as the SMPTE Standard for Television, Audio and Film – Time and Control Code, provide further evidence that these standards are well known and used among those of ordinary skill in the art. Therefore, it is submitted that it would have been clearly

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obvious to one of ordinary skill in the art at the time of the invention to have included a date field that includes data information encoded with a Society of Motion Picture and Television Engineer's (SMPTE) date encoding and wherein the time field includes time information encoded with a Society of Motion Picture and Television Engineer's (SMPTE) time encoding for the advantages given above.

6. Claims 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flavin, in view of Ullman et al, and in further view of Sequeira (US 2001/0000194 A1), all cited by the Examiner.

As to claim 19, the claimed intermediary stream processing application for receiving the media stream that includes the cue packet, processing the media stream, and re-transmitting the media stream to one of other intermediary stream processing applications and a client-side cue handling mechanism, as described in claim 19, is not explicitly disclosed by the Flavin reference. The Sequeira reference discloses a distributed broadcast scheduler architecture where devices such as broadcast schedulers or media servers that can operate independently by providing a master/slave configuration, wherein failure of one device will not bring down the whole broadcast system. Also, a master scheduler/server may schedule digital media events, as well as, change and update events and corresponding events. Each task and media may be distributed to a relevant slave task scheduler for execution at a proper time, wherein a slave task scheduler/server may track the tasks given to it and prepare media devices to send the scheduled information at the appropriate time (pg. 1, [0013] – pg. 2, [0015] and [0031]-[0048] and Figs. 1-2). Furthermore, records including fields, which may have eventID's, process identifiers

("PID"), etc. are transmitted to other devices, such as a set-top boxes (STBs), downstream of the data servers, so that the devices may recognize and extract the data from the data stream and process the data accordingly (see [0099]-[0100], also see [0082]-[0097] and Figs. 12-13, 18-22, and 25-27). Therefore, it would have been obvious to one of ordinary skill in the art to have combined the Flavin and Ullman references with the additional teachings of the Sequeira reference for the advantages of providing additional intermediate stream processing applications in order to have backup systems in case parts of the broadcast network breakdown, as well as, to provide for additional schedulers/servers to make updates or modifications to media streams and events within the broadcast streams. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to have included an intermediary stream processing application for receiving the media stream, processing the media stream, and re-transmitting the media stream to one of other intermediary stream processing applications and a client-side cue handling mechanism, for the advantages given above.

As to claim 20, the claimed processing the media stream includes processing at least one cue packet, is met by the Sequeira reference as combined with the Flavin and Ullman references above in claim 19, where cue packets such as eventIDs, etc., which include start time, end time and other information, as described above, may be processed including updating or editing, adding, deleting, etc.

As to claim 21, the claimed wherein re-transmitting the media stream to one of other intermediary stream processing application and receivers includes adding at least one cue packet to the media stream, is also met by the Sequeira reference as combined with the Flavin and Ullman references above in claim 19, where cue packets such as eventIDs, etc., which include

start time, end time and other information, as described above, may be processed including updating or editing, adding, deleting, etc.

As to claim 22, the claimed wherein re-transmitting the media stream to one of other intermediary stream processing application and receivers includes removing at least one cue packet to the media stream, is also met by the Sequeira reference as combined with the Flavin and Ullman references above in claim 19, where cue packets such as eventIDs, etc., which include start time, end time and other information, as described above, may be processed including updating or editing, adding, deleting, etc.

7. Claims 29-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flavin, in view of Ullman et al, in further view of Reynolds et al (US 2001/0037500 A1), all cited by the Examiner.

As to claim 29, note the Flavin reference which discloses a method comprising generating a media stream containing a media program at a stream generator of a media server as met by a stream generator that is inherent to a media server that produces various content streams 112 that can be sent by communication link 220 as shown in the alternative embodiment of Fig. 2 (see col. 4, lines 38-43). The claimed “identifying an event in the media stream”; “determining if the event is a structural point as defined by configuration information”; and “generating, at a cue handling mechanism of the media server, a cue packet to represent the structural point in response to determining that the event is a structural point” are met by devices that can be used to automatically provide descriptions 250 about the content stream 112 (col. 4, lines 43-53 and col. 5, lines 11-25), where events such as commercial boundaries or segment types, etc. may be

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identified, and based on configuration information one or more of the devices may determine if an event is a structural point, such as a starting point or ending point of a commercial segment, furthermore, from the description of the event an announcement 115 or cue is generated to represent the structural point of the event (also see col. 3, lines 36-39). The claimed “embedding said cue packet in said media stream with the media program” is not explicitly disclosed by the Flavin reference. The Flavin reference teaches that announcements 115, including cue points, may be transmitted in the content stream 112, as described above in claim 1 (see col. 5, lines 17-53). However, Flavin is silent as to whether or not the “cue” packet is embedded in said media stream. Ullman et al teaches an enhanced video programming system and method where a type of cue or uniform resource locators (URLs) are embedded into media streams and transmitted with the media content in the media streams, and the URLs may provide precise time synchronization (see col. 4, lines 44 – col. 5, line 30 and lines 50-54; col. 7, lines 2-11, 44-46 and 54-56; col. 9, lines 61-63 and col. 10, lines 10-15 and 45-49). Therefore, it would have been obvious to one of ordinary skill in the art to have combined the Flavin reference with the Ullman et al reference which provides the additional teachings of embedding cues into one of a plurality of media streams and providing precise time synchronization for the advantages of avoiding the process of having to match up the cues with the content at a receiving system by providing the cues with a media streams, and by providing time synchronization through stamps so that the cues accurately correspond to events in the media streams. One of ordinary skill in the art would have been led to make such a modification for the advantages given above. Flavin further discloses the claimed “communicating said media stream and said cue packet from said media server to at least one intermediary network node” as met by the various content streams 112 and

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descriptions 250/announcements 115 are sent to the servers 110 (Fig. 2). The claimed “said at least one intermediary network node modifying, based at least in part on said cue packet, said media stream to generate a modified media stream; and said at least one intermediary network node communicating said modified media stream to at least one client receiver” is met in part by server 110 of Fig. 2 in Flavin, where a person 111 or group of people 111 may manually enter descriptive information about the content of one or more content streams 112 they are viewing (col. 3, lines 58-65), or the descriptions 250/announcements 115 may be entered automatically as described above, and the content stream(s) 112/announcement(s) are communicated to segment announcement receivers (150, 160, 161, 163 etc., see Fig. 1). The Reynolds et al reference specifically teaches a meta data substitution system 100 (Figs. 1-3) that can be situated at any point downstream of the original point of video distribution, such as a regional television network, a local television network affiliate, a local cable head end, or an internet service provider (see ¶s [0025], [0028]-[0030]). Therefore, it would have been obvious to one of ordinary skill in the art to have combined the Flavin and Ullman references with the additional teachings of the Reynolds et al reference for the advantages of providing additional intermediate network node(s) for modifying a media stream to generate a modified media stream, as well as, to provide for additional nodes or schedulers/servers to make updates or modifications to media streams and events within the broadcast streams that are more applicable to receivers in a specific or local region. Therefore, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to have included at least one intermediary network node modifying, based at least in part on said cue packet, said media stream to generate

a modified media stream; and said at least one intermediary network node communicating said modified media stream to at least one client receiver, for the advantages given above.

As to claim 30, the Reynolds et al reference as combined above further discloses the claimed said at least one client receiver processing said modified media stream to generate output to an end user as met by viewer 70 as shown in Fig. 1 (see ¶ [0025]).

As to claim 32, the Reynolds et al reference as combined above further discloses the claimed modifying comprises adding at least one cue packet to the media stream as met by the substitution system 110, including inserter 136 and processor 134, as shown in Fig. 2 (see ¶'s [0025], [0029], [0041]-[0043]).

As to claim 33, the Reynolds et al reference as combined above further discloses the claimed modifying comprises removing said cue packet to the media stream as met by the substitution system 110, including stripper 132 and processor 134, as shown in Fig. 2 (see ¶'s [0025], [0029]-[0039], [0041]-[0043]).

As to claim 34, the Reynolds et al reference as combined above further discloses the claimed said modifying comprises inserting a second media stream into said media stream as met by the substitution system 110, including processor 134 and inserter 136 as described above, where the inserter 136 generates and inserts the final video data stream as shown in Fig. 2 (see ¶ [0041]).

As to claim 35, the Reynolds et al reference as combined above further discloses the claimed said second media stream comprises at least one advertisement as met by ¶ [0027].

As to claim 36, the Reynolds et al reference as combined above further discloses in Figs. 1 and 3 the claimed said media stream and said cue packet are communicated from said media

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server (50) [to] a plurality of different intermediary network nodes (58 & 100 and 60 & 100a), wherein each of said different intermediary network nodes comprises respective target client receivers (regional viewing audience 59 and local viewing audience 61, both having respective target client receivers) to whom it communicates modified media stream generated thereby (see ¶ [0028] as described above).

As to claim 37, the Reynolds et al reference as combined above further discloses in Fig. 3 and in ¶ [0028], as described above, the claimed generating, by a first of said intermediary network nodes, a first modified media stream (110'); and generating, by a second of said intermediary network nodes, a different modified media stream (110'').

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoye whose telephone number is **571-272-7346**.

The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at **571-272-7353**.

Any response to this action should be mailed to:

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is **571-272-2600**.

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Michael W. Hoyer
March 29, 2007



JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600